WHAT IS CLAIMED IS:

1. A diagnostic assay for detecting the presence of at least one biomarker indicative of intra-amniotic inflammation in a sample of amniotic fluid, comprising (A) mixing an adsorbent that binds at least one biomarker associated with intra-amniotic inflammation with a sample of amniotic fluid and then (B) monitoring said mixture for binding between said biomarker and said adsorbent, wherein said assay detects at least one biomarker that is a calgranulin.

2. A diagnostic assay as claimed in claim 1, wherein said adsorbent is an antibody immobilized on a solid substrate.

3. A diagnostic assay as claimed in claim 2, which is an ELISA.

4. A diagnostic assay as claimed in claim 2, wherein said solid substrate is a probe.

5. A diagnostic assay as claimed in claim 4, wherein said biomarker is detected by laser desorption/ionization mass spectrometry.

6. A diagnostic assay as claimed in claim 1, wherein said adsorbent is immobilized on a probe.

7. A diagnostic assay as claimed in claim 6, wherein said adsorbent is a hydrophobic adsorbent.

8. A diagnostic assay as claimed in claim 7, wherein said probe is a Ciphergen H4 probe or H50 probe.

9. A diagnostic assay as claimed in claim 1, which additionally tests for the presence of at least one defensin in said sample of amniotic fluid.

10. A diagnostic assay as claimed in claim 9, wherein said defensin is HNP-1 (alpha-defensin 1).

11. A diagnostic assay as claimed in claim 3, which additionally tests for the presence of at least defensin in said sample of amniotic fluid.

12. A diagnostic assay as claimed in claim 11, wherein said defensin is HNP-I (alpha-defensin 1).

13. A diagnostic assay as claimed in claim 5, which additionally tests for the presence of at least defensin in said sample of amniotic fluid.

14. A diagnostic assay as claimed in claim 13, wherein said defensin is HNP-1 (alpha-defensin 1).

15. A diagnostic assay as claimed in claim 1, wherein said calgranulin is calgranulin A.

16. A diagnostic assay as claimed in claim 1, wherein said calgranulin is calgranulin C.

17. A kit for detecting the presence of at least one biomarker indicative of intra-amniotic inflammation in a sample of amniotic fluid, comprising:

at least one adsorbent that binds at least one biomarker associated with intra-amniotic inflammation; and

instructions for mixing said adsorbent with a sample of amniotic fluid and monitoring said mixture for binding between said adsorbent and a biomarker in said sample,

wherein said kit includes at least one adsorbent that detects a calgranulin.

18. A kit as claimed in claim 17, wherein said adsorbent is an antibody is immobilized on a solid substrate.

19. A kit as claimed in claim 18, which additionally comprises an enzyme-antibody conjugate used to detect biomarker immobilized on said solid substrate.

20. A kit as claimed in claim 17, wherein said solid substrate is a probe.

21. A kit as claimed in claim 20, wherein said kit instructions specify analysis by laser desorption/ionization mass spectrometry.

22. A kit as claimed in claim 18, wherein said solid substrate is a probe.

23. A kit as claimed in claim 22, wherein said adsorbent is a hydrophobic adsorbent.

24. A kit as claimed in claim 23, wherein said probe is a Ciphergen H4 probe or H50 probe.

25. A kit as claimed in claim 17, additionally comprising at least one adsorbent that binds to at least one defensin.

26. A kit as claimed in claim 25, wherein said defensin is HNP-1 (alpha-defensin 1).

27. A kit as claimed in claim 19, which additionally comprising at least one adsorbent that binds to at least one defensin.

28. A kit as claimed in claim 27, wherein said defensin is HNP-1.

29. A kit as claimed in claim 21, which additionally comprising at least one adsorbent that binds to a defensin.

30. A kit as claimed in claim 29, wherein said defensin is HNP-1 (alpha-defensin 1).

31. A kit as claimed in claim 17, wherein said calgranulin is calgranulin A.

32. A kit as claimed in claim 17, wherein said calgranulin is C.

33. A method for qualifying the risk of preterm delivery in a pregnant subject, comprised of analyzing a sample of amniotic fluid from said subject for a level of at least one calgranulin.

34. A method according to claim 33, additionally comprising anaylzing said sample for the level of at least one defensin.

35. A method according to claim 33, wherein said calgranulin is calgranulin A or calgranulin C.

36. A method according to claim 32, wherein said defensin is HNP-1 (alpha-defensin 1) or HNP-2 (alpha-defensin 2).

37. A method according to claim 33, wherein said defensin is HNP-1 (alpha-defensin 1) or HNP-2 (alpha-defensin 2).

38. A method according to claim 37, wherein said defensin is HNP-1 (alpha-defensin 1).

39. A method for qualifying the risk of preterm delivery in a pregnant subject, comprising:

(A) providing a spectrum generated by subjecting a sample of amniotic fluid from said subject to mass spectroscopic analysis that includes profiling on a biologically- or chemically-derivatized affinity surface;

and

(B) putting said spectrum through pattern-recognition analysis that is keyed to at least one peak indicative of the presence of a calgranulin in said sample.

40. A method according to claim 39, wherein said pattern-recognition analysis additionally is keyed to at least one peak indicative of a defensin.

41. A method according to claim 39, wherein said calgranulin is calgranulin A or calgranulin C.

42. A method according to claim 40, wherein said defensin is HNP-1 (alpha-defensin 1) or HNP-2 (alpha-defensin 2).

43. A method according to claim 42, wherein said defensin is HNP-1 (alpha-defensin 1).

44. A method according to claim 42, wherein said calgranulin is calgranulin A or calgranulin C.

45. A method according to claim 43, wherein said calgranulin is calgranulin A or calgranulin C.

46. A method according to claim 39, wherein said chemically-derivatized affinity surface is a Ciphergen H4 probe or H50 probe.

47. A method according to claim 39, wherein said subject does not have a white blood cell count that is elevated out of the normal range.

48. A method of identifying a subject at risk for a pre-term complication comprising detecting one or more biomarkers comprising a defensin, BPI, calprotectin, or a calgranulin in amniotic fluid from the subject.

49. The method of claim 48, wherein the one or more biomarkers detected comprises calprotectin or a calgranulin.

50. The method of claim 49, wherein the one or more biomarkers detected comprises a calgranulin.

51. The method of claim 50, wherein the calgranulin is calgranulin A or C.

52. The method of claim 51, wherin the calgranulin is calgranulin C.

53. The method of claim 49, wherein the one or more biomarkers detected comprises calprotectin.

54. The method of claim 48, wherein the one or more biomarkers detected comprises calprotectin or a calgranulin and one or more of a defensin or BPI.

55. The method of claim 54, wherein the one or more biomarkers detected comprises calprotectin and one or more of a defensin or BPI.

56. The method of claim 55, wherein the one or more biomarkers detected comprises calprotectin, a defensin, and BPI.

57. The method of claim 54, wherein the one or more biomarkers detected comprises a calgranulin and a defensin.

58. The method of claim 57, wherein the calgranulin is calgranulin A or C.

59. The method of claim 58, wherein the calgranulin is calgranulin C.

60. The method of claim 59, wherein the defensin is defensin 1.

61. The method of claim 59, wherein the defensin is defensin 2.

62. The method of claim 48, wherein the preterm complication comprises preterm parturition, preterm PROM, intra-amniotic inflammation, or MIAC.

63. The method of claim 62, wherein the preterm complication comprises preterm parturition.

64. The method of claim 62, wherein the preterm complication comprises preterm PROM.

65. The method of claim 62, wherein the preterm complication comprises intra-amniotic inflammation.

66. The method of claim 62, wherein the preterm complication comprises MIAC.

67. The method of claim 62, wherein detecting one or more biomarkers comprises determining that the concentration of one or more of defensin, BPI, or calprotectin is at or above a diagnostic concentration for defensin, BPI, or calprotectin.

68. The method of claim 67, wherein two or more of defensin, BPI, or calprotectin are at or above a diagnostic concentration for defensin, BPI, or calprotectin.

69. The method of claim 68, wherein defensin, BPI, and calprotectin are at or above a diagnostic concentration for defensin, BPI, or calprotectin.

70. The method of claim 67, wherein the diagnostic concentration for defensin is about 2 ng/ml or higher, the diagnostic concentration for BPI is about 2 ng/ml or higher, and the diagnostic concentration for calprotectin is about 12 ng/ml or higher.

71. The method of claim 70, wherein the diagnostic concentration for defensin is about 3 ng/ml or higher, the diagnostic concentration for BPI is about 2 ng/ml or higher, and the diagnostic concentration for calprotectin is about 15 ng/ml or higher.

72. The method of claim 71, wherein wherein the diagnostic concentration for defensin is about 3 ng/ml or higher, the diagnostic concentration for BPI is about 2 ng/ml or higher, and the diagnostic concentration for calprotectin is about 15 ng/ml or higher.

73. The method of claim 72, wherein wherein the diagnostic concentration for defensin is about 6 ng/ml or higher, the diagnostic concentration for BPI is about 3 ng/ml or higher, and the diagnostic concentration for calprotectin is about 20 ng/ml or higher.

74. The method of claim 73, wherein the preterm complication is MIAC.

75. The method of claim 74, wherein the diagnostic concentration for defensin is about 65 ng/ml or higher, the diagnostic concentration for BPI is about 28 ng/ml or higher, and the diagnostic concentration for calprotectin is about 25 ng/ml or higher.

76. The method of claim 75, wherein the preterm complication is preterm PROM and MIAC.

77. The method of claim 75, wherein the diagnostic concentration for defensin is about 45 ng/ml or higher, the diagnostic concentration for BPI is about 12

ng/ml or higher, and the diagnostic concentration for calprotectin is about 42 ng/ml or higher.

78. The method of claim 77, wherein the preterm complication is intra-amniotic inflammation.

79. The method of claim 48, wherein detecting the one or more biomarkers comprises using a binding agent to bind the one or more biomarkers in the amniotic fluid.

80. The method of claim 79, wherein detecting the one or more biomarkers further comprises using an immunoassay to determine the concentration of the one or more biomarkers.

81. The method of claim 80, wherein the immunoassay is ELISA.

82. A kit for detecting two or more of a defensin, BPI, calprotectin, or a calgranulin in amniotic fluid from a subject, comprising two or more binding agents, each adapted to bind to one of a defensin, BPI, calprotectin, or a calgranulin.